

CLAIMS

I claim:

Claim 1. A processed solid fuel composition for destroying creosote in chimney flues comprising:

a solid particulate combustible cellulosic material (a);
a creosote-destroying chemical agent (b) chosen from the group consisting of metallic chloride of sodium, potassium, zinc, tin, copper and mixtures thereof; and
relative proportions of (a) and (b) are, by weight, from 50 to 99.9% of (a) and 50 to 00.1% of (b).

Claim 2. The processed solid fuel composition according to claim 1, in the form of a log.

Claim 3. The processed solid fuel composition according to claim 3, wherein said log is 6 to 14 inches in length.

Claim 4. The processed solid fuel composition according to claim 1, having an autonomous combustion time with flame of from 30 minutes to 4 hours.

Claim 5. The processed solid fuel composition according to claim 1, wherein the solid particulate combustible cellulosic material (a) consists entirely of wood particles.

Claim 6. The composition of claim 1, wherein the metallic chloride is a combination of sodium chloride and copper chloride.

Claim 7. The processed solid fuel composition according to claim 7, wherein said agent further includes ammonium phosphate.

Claim 8. The processed solid fuel composition according to claim 1, wherein the agent further includes trisodium phosphate.

Claim 9. The processed solid fuel composition according to claim 7, wherein the agent (b) comprises a metallic chloride and trisodium phosphate in a proportion of 10 – 90% by weight of the former and 90 – 10% by weight of the latter.

Claim 10. The processed solid fuel composition according to claim 1, wherein the agent further includes an ammonium salt.

Claim 11. The processed solid fuel composition according to claim 1, wherein the agent further includes ammonium phosphate.

Claim 12. The processed solid fuel composition according to claim 1, wherein the agent further includes a combination of ammonium salt and ammonium phosphate.

Claim 13. A process for manufacturing a processed solid fuel composition for destroying creosote within chimney flues, comprising the steps of:

admixing a solid particulate combustible cellulosic material (a), and a chemical catalytic agent that disaggregates creosote (b), whereby the relative proportions by weight are 50 – 99.9% of (a), and 50 – 00.1% (b) for 100 parts of (a+b); and

shaping the resultant mixture into a generally elongated ____*.

Claim 14. The process according to claim 12, wherein (a) and (b) are admixed and the resulting mixture is extruded.

Claim 15. The processed solid fuel composition as claimed in claim 1, further comprising an odor enhancer in an amount of not more than 5% by weight of the total composition.

Claim 16. The processed solid fuel composition as claimed in claim 1, further comprising a flame colorant in an amount of not more than 5% by weight of the total composition.

Claim 17. A method for forming a solid fuel composition for destroying creosote within a chimney flue of a solid fuel burning appliance, comprising the steps of:

admixing a solid particulate combustible cellulosic material (a) and a creosote-destroying chemical agent (b);

combining said cellulosic material (a) and chemical agent (b) to form a substantially homogeneous aggregate;

forming said aggregate to render it into a solid elongated form.

Claim 18. A process for destroying creosote within a chimney flue of a solid fuel burning appliance, said flue having an undesirable accumulation of creosote deposits therein, comprising the steps of:

inserting a creosote-destroying processed solid fuel composition into an existing fire within said appliance, said processed solid fuel composition comprised of:

a.. a solid particulate combustible cellulosic material; and

b. a chemical agent that disaggregates creosote;

providing ignition and combustion of said fire log within said appliance;

releasing said chemical agent in a gaseous form within said flu;

providing a substantially constant temperature, whereby effectiveness of said chemical agent is optimized thereby disaggregating and destroying the creosote deposits.

Claim 19. The process according to claim 18, wherein the processed solid fuel composition is in the form of at least one log, and is added to an existing fire in the appliance.